Discussion preparation for NPLCC S-TEK subcommittee meeting, June 13-14
Science support needs within the S-TEK strategy
(Please review the following as background for the planned discussion at 2:45 - 3:30 pm on 6/13)

A theme that emerged very strongly from the NWF focus group discussions and during the S-TEK subcommittee discussions in February was an emphasis on *science-support* needs in addition to the science and information needs. In the NWF focus groups these needs were identified in direct response to the challenges participants face in incorporating current and projected climate change impacts into conservation practice, restoration, and sustainable resource management.

This distinction and emphasis is also recognized in the overall goal of the S-TEK strategy:

- A successful S-TEK strategy would maximize the ability of partners/constituents/stakeholders to make good conservation and sustainable resource management decisions under a changing climate (*NPLCC goal #1*). It would do so by providing "everything you need and nothing you don't, to better cope with climate change":
    - the right information (spatial or non-spatial data, TEK, case studies of adaptation action, etc.) at the right scale in the right way and at the right time, and
    - the tools, perspectives, and support needed to make appropriate use of the information.

A challenge in identifying "science support needs" is that those needs are likely to be specific to the entity, type of decisions, and even the area/topic being considered. To develop useful "decision support tools," for example, requires designing those tools in the context of the decisions that are to be supported.

It may be useful to think about the range of potential information and science support needs within a particular focus area, and where the most critical needs are for that focus area or for the management decisions related to that topic. For example, within any particular focus area (e.g., hydrology, coastal erosion, fire regimes), there are likely to be a variety of different types of "needs," including:

- Basic, fundamental, or "new" science, TEK, information, data or modeling (expanding or refining what's known about new or nascent areas of research; also information 'nobody' knows)
    - Of underlying processes and their impacts
    - Of historic, current, and potential future conditions
    - Of the effectiveness of different management activities
- Analyses, integration, and coordination of existing data, datasets, models and information from various sources (putting together existing information in new ways to produce new insights)
- Coordination and sharing of related databases and data collection activities, research results, and management lessons among partners, made accessible in a useful and useable format (making information known by some available to more entities)

- Understanding of and ability to use relevant information in decision-making (help in using information appropriately and effectively)
- Communicating data/model results/information to various audiences (help with outreach to traditional and novel audiences)
- Any combination of the above…

In the annual planning and implementation of the S-TEK Strategy it will be useful to identify which types of needs are most critical within a particular focus area and prioritize work in those areas. It may also be useful for the S-TEK to consider whether they want a diversity of need "types" in the S-TEK Strategy, or a portfolio composed of only one or two types of needs. It may also be useful for the S-TEK to consider that a single project may address multiple need "types." To stimulate thinking and discussion, a few specific examples of science-support needs, and the range of need "types" they address, are shown in the table below. These examples are derived from the NWF focus groups, which identified four areas of science-support needs and reflect the list of need types immediately above.

		Type of need				
		Expanding or refining what's known about new or nascent areas of research	Putting together existing information in new ways to produce new insights	Making information known to some available to others	Help in using information effectively	Help with outreach to traditional and novel audiences
Science-support need identified through NWF work	*Conservation- and management-related tools and associated training (that would be useful to multiple entities)*					
	Tools, guidance, and capacity for integrated analyses of the combined / cumulative impact of CC and other stressors on the resources of management interest		X		X	
	Tools, guidance, and capacity for conducting vulnerability assessments and to share information about those assessments (e.g., a "community of practice")		X		X	
	Listings/descriptions of adaptation strategies and the conditions under which various approaches are effective	X		X	X	
	Catalogue of existing tools and the questions they are designed to addresss			X		
	Training on how to use existing tools				X	
	Specific tools, such as enhanced and expanded mapping				X	
	Role(s) for the NPLCC in coordinating, sharing, and disseminating information throughout the region?					
	Facilitate cross-boundary collaboration		X	X		
	Develop a new "portal" or refine existing portals to connect people with projects, data?, literature, and peers			X		
	Host information and data sharing workshops on priority themes/priorities/focus areas		X	X		
	Key political and institutional cross-boundary issues that should be addressed?					
	Difficulties accessing, sharing and cross-walking data: technological and political		X	X	X	

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	Difficulties in sharing resources (funding, personnel, etc) among entities		X	X	X	
	Improving coordination and communication among and between entities at a variety of levels				X	
	Role(s) for the NPLCC in expanding and coordinating outreach and education in the region?					
	Translate science for easier access by target audiences and decision makers				X	
	Convene diverse groups to focus on outreach and action					X
	Education and outreach with the public					X